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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/665,495 | 09/22/2003 | I-Linag Lin | 4444-0125P | 6867 |
| 2292 | 7590 | 11/17/2006 | | EXAMINER |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | LEVINE, ADAM L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3625 | |

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/665,495 | LIN ET AL. | |
| | Examiner | Art Unit | |
| | Adam Levine | 3625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 July 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,10-12 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,10-12 and 20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 July 2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

Applicants' amendments and remarks filed July 20, 2006, are responsive to the office action mailed May 26, 2006. The amendments include a replacement abstract, significant amendments to the specification, amendments to the drawings, and amendments to the claims. Claims 1,10-12, and 20 have been amended. Claims 2-9 and 13-19 have been cancelled. Claims 1,10-12, and 20 are pending and considered in this office action.

Pertaining to objections to the drawings in the previous office action

The drawings filed November 24, 2003, were objected to because they were not labeled "Replacement Sheet" or "New Sheet." These requirements have been appropriately addressed with new correctly labeled drawings and annotated sheets indicating the changes from the prior versions. The objections are withdrawn.

Pertaining to objections to the claims in the previous office action

Claims 6-9,11,15,17-18, and 20 were objected to for various informalities. Claims 6-9,15, and 17-18 have been cancelled. These objections are therefore moot and are withdrawn. Claims 11 and 20 have been amended to adequately address the objections. The objections to claims 11 and 20 are therefore likewise withdrawn. The amendments have made apparent another significant issue that will be addressed below.

Pertaining to rejection of claim 19 under 35 USC §112 in the previous office action

Claim 19 has been cancelled. The rejection is therefore moot and is withdrawn.

Response to Arguments

Applicant's arguments filed July 20, 2006, have been fully considered but they are not persuasive. In response to applicant's argument that the present invention is directed at a semiconductor package while the prior art is directed at a power converter, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicants attempt to distinguish the prior art by arguing that it is directed to design of a power converter while the present application is directed to a semiconductor package. It should be noted that these are potentially the same, as a semiconductor package can be a power converter and a power converter can be constructed from a package of semiconductors. This is not however the most significant issue.

Even were the products different, the nature of the products is not determinative in this situation. The examiner notes that the application is not claiming a new, unique, novel, or nonobvious design for a semiconductor package. It is directed at a system and method for gathering and analyzing information that will be used to assemble a package. As such it is virtually identical to a system and method for gathering and analyzing information that will be used to assemble another similar package, such as a

power converter, power supply, or multiconductor system for example. The only element that varies is the information itself, being directed at the assembly of slightly different products. The information itself however, and in this context even the particular product assembled, is descriptive material and does not result in differentiation between the methods and systems themselves. The method steps and system elements are the same. The information is not functionally involved in the recited steps of the method. Because it has no functional role in the method it is non-functional descriptive material. This descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106). Again, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicants argue that the prior art does not disclose “producing a plurality of analysis results by a plurality of analysis modules,” and that the present analysis modules are distinguishable from the prior art because they are aimed at a semiconductor package and that therefore “the detail contents of each analysis module are different.” To the extent that the differences pertain to descriptive information alone, “detail contents,” this argument is treated above. Regarding “producing a plurality of analysis results by a plurality of analysis modules,” these elements are disclosed in the prior art as noted in the previous office action (paper no. 20060522 at page 5, citing

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Vinciarelli (see at least figs.5-8, column 1 lines 30-35, 64-column 2 line 10, 20-25; column 3 lines 53-65, column 32 line 44 – column 33 line 3, column 35 lines 13-20)).

Specification

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Although the examiner understands that the applicants have attempted to clarify the specification to some extent, in many instances it continues to appear to be a literal translation into English from a foreign document. It is replete with grammatical and idiomatic errors. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because, as noted below, the claims suffer from a similar problem. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed

within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Claim Objections

Claims 1,10-12, and 20 are objected to because they appear in many instances to be a literal translation into English from a foreign document. There are a significant number of grammatical and idiomatic errors, failing to conform with current U.S. practice.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,10-12, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Vinciarelli (Paper No. 20060522; US Patent No. 6,110,213).

Vinciarelli teaches all of the limitations of claims 1, 10-12, and 20. For example, Vinciarelli discloses methods for designing and manufacturing electrical equipment using expert systems that accept design choices and specifications from a user and

determine feasibility and manufacturability of the design using modules that perform analyses regarding various stress factors. Vinciarelli further discloses:

- inputting a required information about a semiconductor package: by a user (see at least abstract, figs.5,8; column 4 lines 15-21); via internet (see at least fig.5, column 2 lines 11-19); required information is selected from at least one of a package type, substrate type (see at least column 8 lines 36-56, 66-column 9 line 11, column 20 line 55 – column 21 line 7, column 26 line 63 – column 27 line 28), die dimension (see at least fig.6, column 3 lines 20-39, column 4 lines 15-21, column 6 lines 26-31, column 8 lines 23-35, 66-column 9 line 11, column 26 lines 40-52), thermal performance (see at least abstract, column 1 lines 21-49), numbers of input terminals and output terminals (see at least abstract, column 2 lines 11-19, 28-41, column 3 lines 40-52).
- storing said required information in a database: (see at least fig.5, column 21 line 56 – column 22 line 8).
- producing a plurality of analysis results by a plurality of analysis modules: including thermal analysis, circuit analysis, stress analysis, reliability analysis, material analysis, and substrate analysis modules, according to said required information of said order (see at least figs.5-8, column 1 lines 30-35, 64-column 2 line 10, 20-25; column 3 lines 53-65, column 32 line 44 – column 33 line 3, column 35 lines 13-20).
- recording said analysis results in said database: (see at least column 32 line 44 – column 33 line 3).

- responding said analysis results to said user by a reply means: (see at least abstract, figs.7C,8; column 2 lines 11-19, column 21 lines 41-55. Please note: this is interpreted as reporting the analysis results to the user by any means).

Pertaining to system claims 1 and 10-11

System claims 1 and 10-11 are rejected based on the same rationale as noted above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

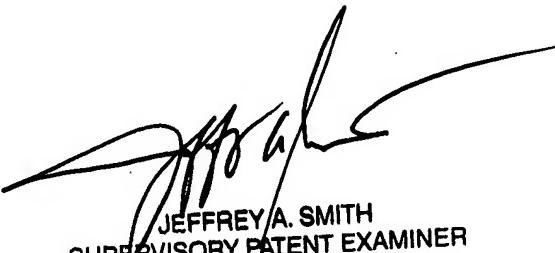
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Levine whose telephone number is 571.272.8122. The examiner can normally be reached on M-F, 8:30-5:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571.272.6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adam Levine
Patent Examiner
November 12, 2006



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